

Overview: HELIOS (Hardware Engineering Launchpad Inspired by Open Source)

As NASA renews its commitment to deep space exploration, new ways must be sought out to make the process of developing required technologies more cost-effective. Recognizing the valuable problem solving potential that exists in the American public, the HELIOS Technology Challenge Pilot Program was created in 2012 by a small group of NASA employees as an experiment in collaboration. HELIOS stands for Hardware Engineering Launchpad Inspired by Open Source. The principal goal of this low-cost, no-frills project is to promote cost-effective innovation and collaboration with the public in the development of open source-friendly, early stage concept-type technology.

HELIOS is not a multi-million dollar project but rather an ultra-low cost experiment in open source hardware engineering with a specific audience in mind. The program establishes a virtual pathway that enables NASA "Challenge Champions" to collaborate with Hackerspace, Makerspace, citizen inventors, and DIY communities in the solving of space technology related problems. The HELIOS Technology Challenge Pilot Program is based on three core principles: cost-effective innovation, a collaborative work environment and open source-based idea ownership.

HELIOS is not about fancy and exotic solutions. It's about developing simple, low-cost ideas that get small practical jobs done. More information can be found on the challenge website at <http://HeliosChallenge.org>.